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An approach to the design of ideal course structures for Human Settlement Management Training

A Report arising from the UNESCO/INFAC seminar on 'Training Techniques and Methods for Human Settlement Managers', held at Gouvieux (Oise), France, November 10th-20th, 1980.

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1 Introductory

This report describes an approach to determining ideal course structures for Human Settlement Management Training, which derives from a Team Project Exercise undertaken at the above cited UNESCO/ INFAC Seminar. Members of that team were Martin Wynn and John Taylor (North-East London Polytechnic), Jan Renee Graf (University of Michigan) and Fanny Tabak (University of Rio de Janeiro). The approach is based on the assumption that there is no one universally applicable 'ideal course structure', but rather that courses should be designed to exploit to the full the learning possibilities offered by such training courses, be they concerned with the 'training of trainers' or 'training of managers'. The emphasis, then, is on finding the right blend, mix and variety of learning experiences to best match the requirements of individual courses. It is nevertheless suggested that certain common training goals and objectives will be relevant to all such courses, even if their exact weighting will differ somewhat from course to course; from here, then, one can proceed to explore how the balance of learning goals and objectives particular to each course can best be achieved through searching for the optimum mix of approaches, methods and techniques. This report outlines a provisional matrix that may be of value in determining such ideal courses structures, which at the same time can be used as a framework for monitoring and analysing past and future courses. Reference to particular methods and techniques in the text is made without much explanatory information, but brief notes on some of these are provided in the attached Appendices B and C.

2 Problem Set, Training Goals and Learning Objectives

The content and structure of any training course will inevitably depend, to some extent, on what may be termed the 'problem set' i.e. all the elements and variables that condition the planning and implementation of any one course (Figure 1). These factors would include the availability of relevant data, the financial and human resources available for planning and running the course, the aptitude of course participants and any particular problems and issues which might be the preferred focus of any one course. However, it is suggested that training courses - for trainers or managers - in the field of human settlement management will aim to help course members 'learn' in three main interrelated areas, which may be termed 'generalised training goals'. These three goals are:

- A. Learning to Understand and Manage the Development Process
- B. Learning to Understand Yourself and Others
- C. Learning how to Train

Clearly, in a strictly training trainers' context, Goal C is likely to be of greater importance than in a 'training managers' course (Figure 2). But if the underlying aim of UNESCO training programmes is to diffuse improved performance capacity as widely as possible throughout the management systems that attempt to direct the course of change in human settlements, then the 'learning to train' goal is likely to be of some relevance to all courses that

form part of this wider programme.

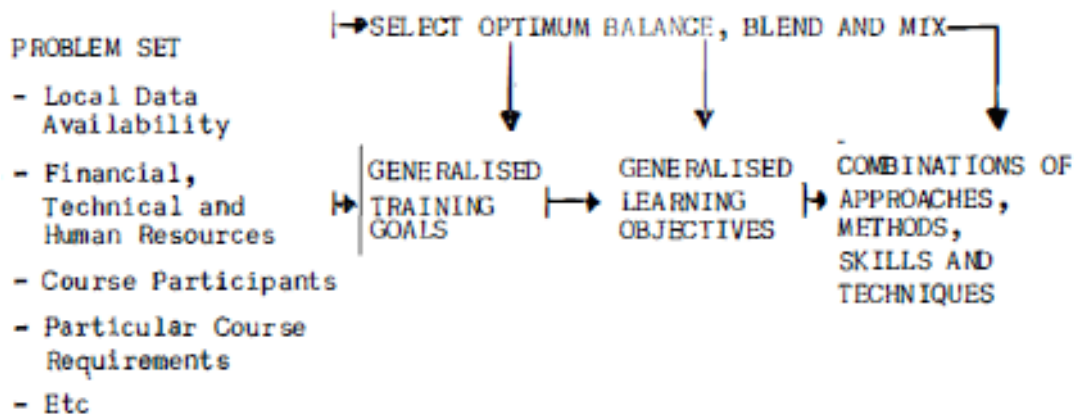


Figure 1: Selecting the Optimum Balance, Blend and Mix from the 'Problem Set'

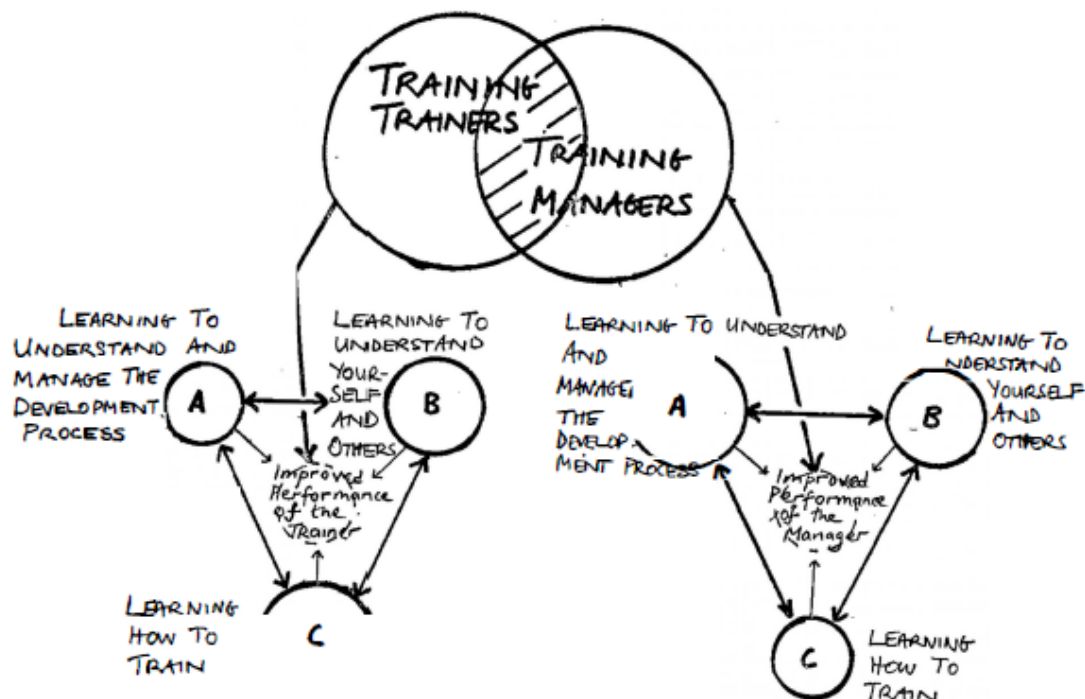


Figure 2: Generalised Training Goals in Human Settlement Management Courses

Similarly, Goal B (Learning to Understand Oneself and Others) is likely to be of significance in enabling participants to develop their self-awareness and broaden their perceptions of other roles and activities. Indeed, 'learning to learn' is a major theoretical underpinning to this triad of training goals, and Goal B will be of some significance in any course which attempts to foster inter-disciplinary and transectoral, perspectives.

After group discussion and feedback from all course participants, sets of objectives were agreed upon for each of these three training goals. These objectives, listed in Table 1, are largely self-explanatory, but it is perhaps worth briefly making certain contextual remarks here. The set of objectives relating to Goal A is based on what is often termed a 'decision-centred' or 'systems' view of planning, as conceptualised by Chadwick (1971) and McLoughlin (1969, 1973) in the late sixties and early seventies, which has had a major impact on the organisation of planning and management systems in Europe in the seventies. It should be stressed however that this framework is intended to be used as much to facilitate a 'bottom-up' understanding of reality, as to generate 'top-down' action programmes for change; and that an appreciation of transectoral inter relationships (A2), and broad based implementation and monitoring methods (A5, A6) are seen as particularly important.

The second set of objectives, concerning Goal B, relate to what is often termed 'social skills training'. This has been defined by Fraser and Phillips (1980) as "any form of training which is designed to help people understand themselves, learn about how others see them, and make choices about their behaviour." This form of training can

encompass a range of techniques (e.g. Rackham's Behavioural Analysis, the Johari Window Team Effectiveness Survey), many of which can be used in group training situations which may also meet other learning objectives. In this way, then, the richness of the learning experience for course participants can be enhanced without undue extra requirements on time and space. We shall return to this theme later.

Finally, the third set of objectives concerns the need to provide participants with a knowledge, and, as far as is possible, first-hand experience, their needs (C1, of the range of training methods most appropriate to C2). At the same time, it was considered important that the need for sensitivity, flexibility and innovation in the use of training methods (C3, C4) should also be highlighted; and participants should be made aware of the desirability of, and scope for, setting up feedback mechanisms within various temporal organisational contexts relating to training. Whilst 'day to day' (primary) and 'end of course' (secondary) feedback is likely to be of importance in contributing to the smooth running of individual courses, it was felt that attention should also be given to providing post-course (tertiary) evaluation and feedback, and continuity and linkage between courses (quaternary). To get over these concepts to participants, then, was all seen to fit within the general framework of the 'learning to train' objectives.

Training Goals	LEARNING OBJECTIVES
G O A L A	To Develop a capacity to:- A1 Identify critical issues and problems A2 Identify inter-relationships between problems A3 Generate alternative courses of action A4 Evaluate and appraise potential impacts of different courses of action A5 Implement Preferred Courses of Action A6 Monitor and Respond to Change in the Decision Environment
G O A L B	B1 Heighten awareness of one's own strengths and weaknesses B2 Heighten awareness of others' perceptions of your role B3 Broaden your understanding of others' strengths and weaknesses B4 Improve ability to effect appropriate interpersonal interaction B5 Make fuller use of your own potential B6 Improve Communication Skills
G O A L C	C1 Provide an outline of the range of available instructional methods C2 Give participants first hand experience of using selected training tools and mechanisms C3 To attempt to give participants the awareness and sensitivity to know how and when to use different tools and mechanisms as appropriate C4 To encourage flexibility in the use of techniques; and an ability to adapt and try new innovatory methods as necessary C5 To provide participants with knowledge and experience of a range of on-going feedback systems: a) Primary - day to day b) Secondary - end of course c) Tertiary - post-course evaluation d) Quaternary - inter-course linkages

Table 1: Learning Objectives Related to the Triad of Training Goals

3. Towards a Matrix for Designing and Monitoring Ideal Course Structures

In this section an attempt is made to move towards a provisional matrix for use in the design and monitoring of course structures. Before embarking on this task, however, it is worth first noting certain preliminary points.

At the Gouvieux seminar, the team working on this project suggested a provisional matrix of objectives against methods which the course group as a whole began working on. Time constraints meant that no satisfactory conclusion was reached on the merits of this matrix, and, on reflection and after further research, a somewhat modified format is presented here, which nevertheless builds on this original matrix; for reference purposes

however, this original matrix is included in this report as Appendix A.

On a rather different tack, it is important to view the ensuing argument with the understanding that we are not yet trying to outline course components in any strictly programmed, linear fashion. Rather we are trying to establish the potential for enriching a training programme through suggesting how a variety of learning experiences may be meaningfully combined, without a necessarily proportionate increase in training time. Here, it is perhaps useful to reiterate Lewin's assertion (see Benne, 1976) that training is more effective if people learn at three levels - through thinking (cognitive/conceptual – 'I've thought it through and it makes sense'), through doing (psychomotor – 'I've tried it and it works'), and through feeling (affective – 'I've experienced it and it feels right'). The important point is that these three types of learning do not necessarily follow one another in linear fashion, but rather can overlap or happen simultaneously through careful course design and execution. Similarly, the sets of learning objectives relating to the three training goals should not be thought of as necessarily separate entities, but rather as interrelated and overlapping objectives that may be pursued simultaneously through exploiting a common data base (largely drawn from the local area) in different ways,

Finally, and connected with the above, any course should have a certain dynamic of its own which will influence the overall course direction, and course design should ideally allow for such flexibility. This means, then, that the variety of training methods employed should be such that they facilitate a degree of self-determination of course content and structure by the participants themselves. Figure 3 attempts to provide an overview of some of the training methods that could be used in future Human Settlement Management courses, with those to the right side of the figure providing participants with most opportunity for influencing course direction. Here, then, it is really a question of getting the right balance of methods for any one course; and, as already noted, the 'problem set' will provide indicators as to which methods will be most appropriate for a particular course.

With these perspectives in mind, the triangular matrix shown as Figure 4 would seem of value as a vehicle for trying to work towards establishing ideal course structures, the emphasis being on putting together combinations of learning experiences which may act as models for subsequent courses. The left side axis concerns the major scientific or technical approaches to understanding and analysing the planning and development processes that relate largely to the set of objectives A1-A6. The review of past courses at the Gouvieux seminar clearly revealed that systems Modelling and Gaming are valuable and effective approaches; it is suggested here that, in addition, the Case Study Documentation and Analysis format, as presented by Haywood, Wynn and Taylor at Gouvieux (see Wynn and Taylor 1980; Wynn, Haywood, Taylor and Smith, 1980) could play a useful part in some training courses, as could the strategic choice approach to decision-making, devised by Friend, Jessop and Hickling, which has been used in training courses in both the developed and developing worlds (see Friend and Jessop, 1977; Hickling, 1975, 1979).

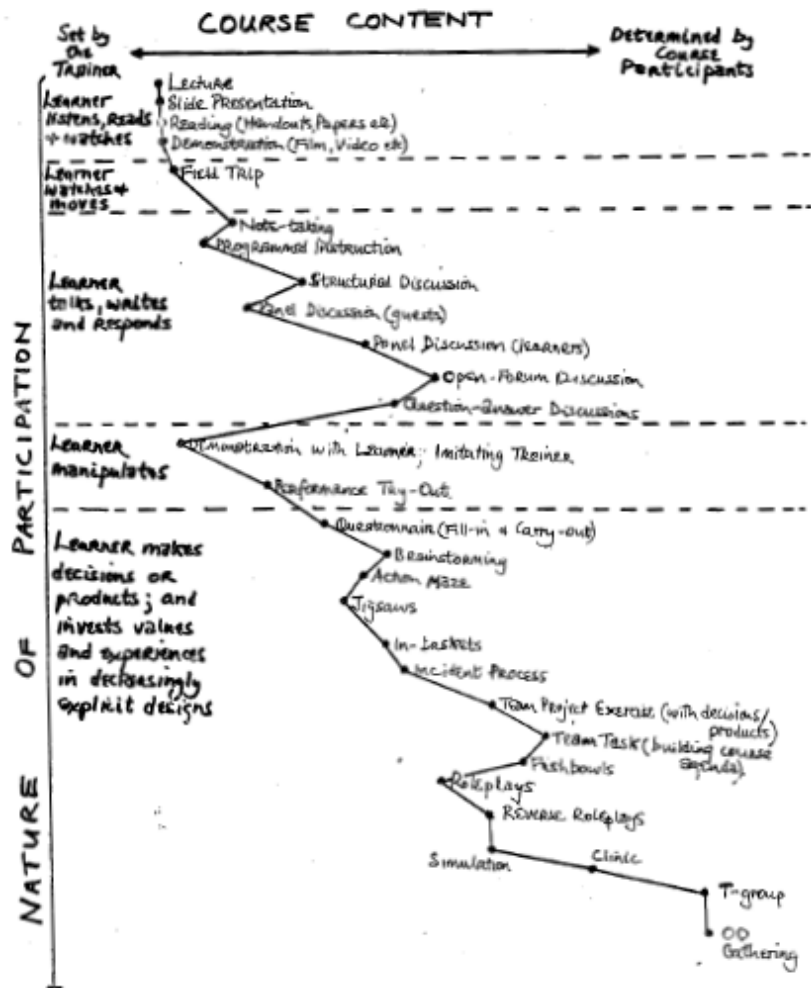


Figure 3: A Two-Dimensional List of Some Training Methods.

Based on a similar figure in Laird (1978), p. 130. Appendix C, attached to this paper, provides more detail on some of these methods.

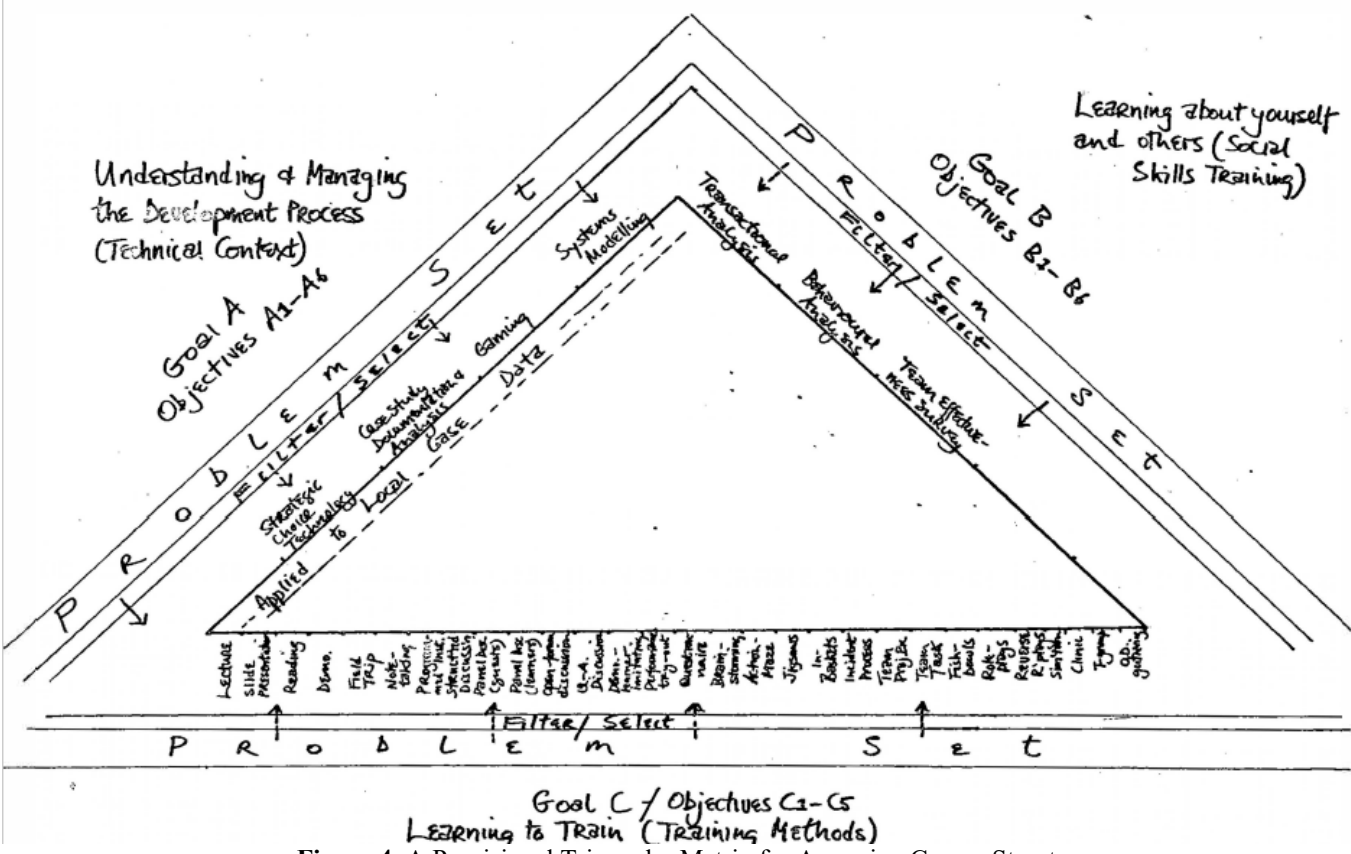


Figure 4: A Provisional Triangular Matrix for Assessing Course Structure

The right side axis concerns those skills and techniques which could be used in enhancing participants' self-awareness and perception of others (Objectives B1-B6). Some introductory notes on these techniques are included in Appendix B, attached to this paper. Suffice it to say here that relatively little attention seems to have been given to this aspect of training in the UNESCO Human Settlement Management courses held to date, and the incorporation of such components may appear as an irrelevant 'luxury' to some. However, it seems worth stressing again that many of these training exercises can be undertaken in parallel with others that may centrally address other learning objectives. A Team Effectiveness Survey, for example, based on The Johari Window Concept (see Appendix B) could be used as a follow-up theme to any Team Project Exercise, which concerned, for example, Game Design. Similarly Rackham's Behavioural Analysis (see Appendix B) is a simple technique for analysing inter-person exchanges which could be introduced in small group work where the major focus might concern, for example, the application of Strategic Choice Technology to a particular local developmental problem. Again, then, it is these possible combinations that need to be explored, tried, and if successful, packaged into software learning kits for subsequent use and refinement.

Finally, the bottom axis encompasses those range of training methods included in Figure 3. If course participants are to improve their performance capacity as trainers (Objective C1-C5), then first-hand experience of a number of such methods will help develop an appreciation of which methods may most effectively be used in different training situations. At the same time, if learning is to take place at the three, levels suggested by Lewin (be it about systems modelling, gaming or whatever) then this can only happen if an appropriate combination of training methods are used which selectively (i.e. not all methods need be used) span the full spectrum of learner involvement graphically portrayed in Figure 3.

It goes somewhat beyond the scope of this report to attempt to fill in this triangular matrix for any of the courses undertaken to date, although those who played a leading part in these may wish to do so. A useful starting point could be to identify major course focuses e.g. Gaming or Systems Modelling (reflecting a top prioritization of Training Goal A). From here the linkages with Training Methods used in conjunction with this focus can be drawn in, with thicker lines representing greater time spent (or some other variable e.g. instructor's assessment of learning value). Similarly, links can be filled in to plot any combinations with Social Skills Training which might have taken place. In this way, we can build up cases of how training courses were run in the past, which, set alongside some form of assessment by the instructor or monitoring team, and detail on the specific 'problem set', may act as useful models for future course design. At the same time, by examining the full range of possible combinations, and determining which are workable, when and how, we can move towards providing an optimum mix of learning experiences.

4 Concluding Remarks

In conclusion, it needs to be said that this report has been somewhat ambitious, but it is hoped it may constitute a point of departure for further developments in three inter-related areas. First, it provides a provisional framework for the monitoring of past and future course structures in the Human Settlement Managers Training programme, Secondly, this framework has implications for how the existing Training Handbook could be rewritten, the stress being on trying to find the right blend of methods, techniques and thematic components to provide the richest learning experience in any one training course. Here it is perhaps worth reiterating that the 'problem set' will of course condition the possible; but that the value of the Handbook can be in exposing how the potential learning opportunities are exploited to the full. Finally, it is hoped that the discussion surrounding the possible matrix combinations (in conjunction with Appendices Band C) will provide a basis for at least thinking about how a series of software packages could be put together for use in future UNESCO training activities.

Appendix A: The Original Objectives v Methods Matrix used at the Gouvieux Seminar

METHODS	Technical Content										Handling Complexity	Decision Making Aids	Communication		Individual	Group	Observation Skills	Time Management																		
	Field Visit	Interview	Model	Documentation	Case Study	Game Run	Lectures	Slides	Brainstorm	Photos	Gen. Systems/ Game Model Design	Flow Chart	Matrices	Scorecards	Game Runs	Model Runs	Strategic Choice	Uncertainty Exercise	Personal Presentation	Graphic	Interfacing	Spec. Metrics - Chart	Role - Playing	Role - Rehearsal	Facilitating Techniques	Round Table	Visual Inspection	Small Group Listening	Group Observation Exercise	Feedback Exercise	Video Analysis	Survey - Questionnaire	Monitoring Team	Personal Motivation	Time Allocation Exercise	Task Prioritization
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Appendix B: Introductory Notes on Some Possible 'Social Skills' Training Components

Behavioural Analysis

Behavioural Analysis is a technique in which an observer makes a record of the interaction between two or more people by placing what they say to each other into one of a number of carefully selected categories. The observer seldom uses more than a dozen separate categories at any one time. These categories can have explicit names such as 'proposing', 'seeking clarification', 'disagreeing', 'defending', 'blocking', 'bringing in' etc. Clearly the observer needs to be trained so that he/she can provide consistently reliable information, but this form of training can easily be fitted into a 2-3 week training course, using inter-person exchanges which may also serve other purposes {e.g. group discussion on developmental/ planning themes}.

Behavioural analysis is a powerful technique that can be taught entertainingly and is easily grasped by most managers, providing personnel with a readily identifiable framework within which to analyse their strategic use of language in the achievement (or non-achievement) of their objectives. For further details see Rackham and Morgan (1977),

Transactional Analysis

Transactional Analysis was devised by Eric Berne as a technique for making a person aware of the psychological forces which tended to influence his behaviour when interacting with others. The technique has been simplified and used in management training for a number of years (see Bennett, 1975; Barker, 1980); The United Nations Headquarters in New York, for example, has held several transactional analysis seminars as part of their regular training programmes.

The technique is based on several assumptions: first, all phases of an individual's past mental development are memorised in his brain, and only apparently forgotten; at all moments of behaviour, above all when interacting with other people, the past tends to interfere with the present; and there are three main 'states of mind' the 'child' (dominated by emotions), the 'parent' (influenced by moral rules and social norms) and the 'adult' (based on rationality and experimental thinking). Additionally there are four life positions 'putting people down', 'putting yourself down', 'putting yourself and others down' and 'feeling both oneself and others are worthy'. The basic aim of training involving use of these concepts is to make the individual aware of how others perceive and react to what he/she is saying or doing; case discussion, video-tape analysis and role-playing tend to be major methods used in such training sessions.

For an account of how transactional analysis has been used in third world management contexts, see Ferrari (1979).

Team Effectiveness Survey (Johari Window)

The Team Effectiveness Survey, as used here, is based on the Johari Window concept developed by Luft and Ingham. It can be used for analysing inter-person exchanges and total 'team effectiveness', and is essentially an information processing model, graphically portrayed as a four-celled figure - the Johari Window (Figure 5).

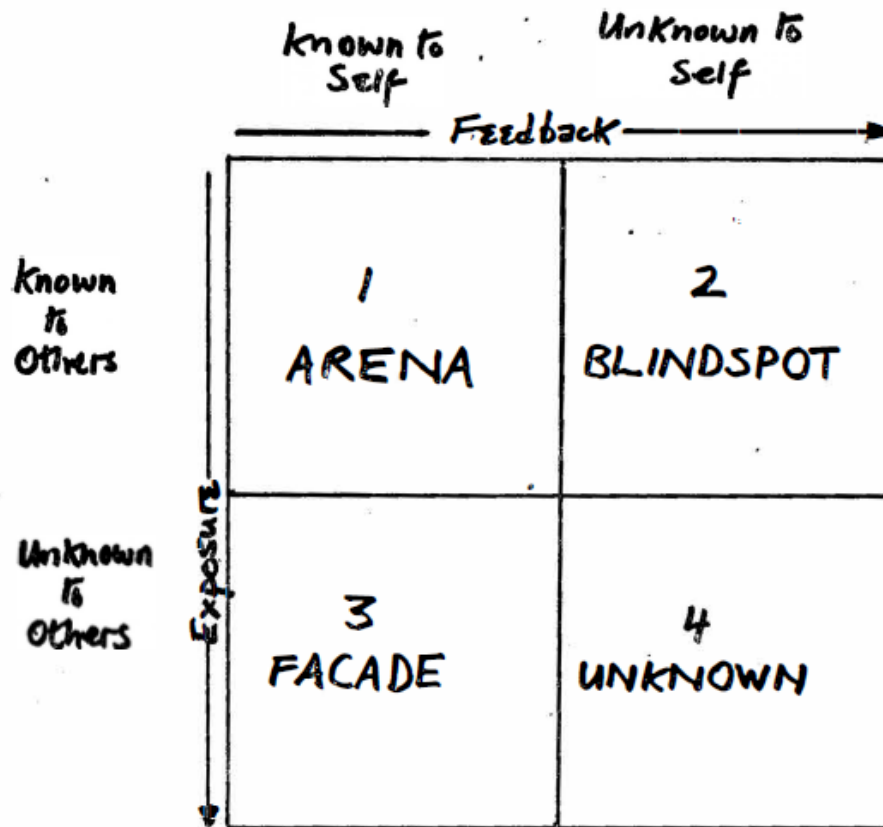


Figure 5: The Four Cells in the Johari Window

The 'window' reflects the interaction of two sources of information - self and others - and the inner partitions of the window (which will vary in size from relationship to relationship) represent the nature of this interaction. In brief, Area 1 - the Arena - constitutes that portion of the total 'interpersonal space' which is devoted to mutual understanding and shared information. Generally speaking, the larger this area becomes, the more rewarding, effective and productive the relationship will become. Area 2 - the Blindspot - is that portion of interpersonal space which holds information known to others, but unknown by self, constituting a handicap for the self since one can hardly understand the behaviours and decisions of others if the data upon which these are based is not known. Area 3 - the Facade - may similarly be considered as an inhibition to inter-personal effectiveness, but here it is due to an imbalance of information which would seem to favour the self. Finally, Area 4 - the Unknown - covers the portion of the relationship devoted to material neither known by the self or by other parties. The information within all these areas can be of any type, but must be relevant to

the relationship at hand, having a bearing on its productivity and effectiveness.

The Johari window concept can be used to provide feedback in a variety of group dynamic contexts and can be linked to varying interpersonal and team styles. It is but one approach to considering personal and team effectiveness and can be integrated into group sessions and workshops which may also have other learning objectives.

Appendix C: Introductory Notes on Some Training Methods

Programmed Instruction ('small-step' learning)

Participants respond to a question - stimulus which follows the presentation of limited amounts of information, participants are given the 'correct' answers right away, providing immediate feedback on the quality of the response. The full set of information 'bits', plus question stimuli, may be presented in written form or as an audio-visual format, as well as through 'teaching-machine' and computer applications.

Performance Try-out

Performance try-outs act as on-going feedback mechanisms for gauging participant learning; but, perhaps more importantly, they constitute a significant learning experience for the protagonist, giving him the opportunity to put what he has learned, (as manager or trainer) to the test in a group situation.

Action Maze (programmed case study)

An action maze is a programmed case study; participants receive a printed description of the case, with enough detail to take them to the first decision-point. The description gives them options from which to select. Once the group have selected their decision option, they are supplied with the next frame, indicating the course of action taken in the live case study. Ensuing debate considers and compares implications of the various options.

Jigsaws

As the name suggests, participants put pieces together to complete an integrated picture. May be used in simple ice-breaker contexts (e.g. 'square experiment') or in more complex situations related to decision-making data (e.g. given key variables of a decision-making problem, the task is to select proper action for every possible combination of variables). Useful in teaching synthesizing skills, problem-solving skills, or organisational skills.

In-baskets

A form of simulation based on 'in-basket' material one might expect to find on a typical (or atypical) work day. Usually participants must use their own resources to find solutions. Provides a useful method for operationalising problem solving techniques under pressure. Feedback discussion facilitates several helpful learning activities: reinforcement of successful practices; re-examination of problem areas; self-evaluation by participants of learning achievements.

Incident Process

Based on documented case studies, the method involves providing participants with far too little information for them to reach any decision. Additional data is available, on request, from the trainer, usually in printed/oral form. Useful in planning/management problem solving contexts.

Fishbowl

A special kind of discussion group particularly suited to practicing and evaluating inter personal and 'social' skills, as well as developing argument on a particular theme. The name comes from the structuring of the group, for at certain times discussants sit in the centre of the wider group. Other members observe this 'fishbowl' and will eventually take place in it themselves. The method works as follows:

1. Define subject area
2. Formulate a number of pertinent questions related to critical issues. (These may have already been identified in previous sessions, e.g. on systems modelling of reality).
3. Participants are assigned places in an inner ring (the 'fishbowl') and an outer ring.

4. An inner-ring moderator is designated to use the questions (as in 2 above) for instigating and maintaining discussion.
5. Others in the 'fish bowl' (inner ring) are given the task of keeping discussion going - but their contributions are limited to one minute per input.
6. Outer-ring members (unknown to inner-ring members) are given specific observational roles e.g.:
 - a) Counting the number of times each person speaks.
 - b) Counting the number of times discussion drifts to other topics.
 - c) Who interrupts and who is interrupted.
 - d) Disagreements: with and by whom?
 - e) Any conclusion about the critical issues etc.
7. At a given time, stop the 'fishbowl' and feed back data gathered in Step 6 above.
8. Repeat stages 4-6 with different participants in inner and outer rings.

Reverse Role plays

Reverse roleplays are helpful methods for gaining an understanding of one's own and others viewpoint, and communication strengths and weaknesses. These can be used in various ways; Roles can be switched in the middle of a game; or participants can be asked to 're-enact' others contributions to any presentation or exchange (monitored by training team, perhaps with video equipment), thus highlighting vocabulary usage, stylistic elements etc.

Rotation Roleplays

An extension of reverse roleplays, whereby one 'actor' replaces another in a roleplay. Such replacement can be spontaneous, but for the sake of achieving some constructive feedback, it may be preferable if rotations are managed by the trainer/instructor, who may quietly ask an observer to enter into the roleplay as a designated character. This form of roleplaying can play a valuable part in facilitating multi-person and multi-disciplinary interpretation of roleplay situations.

Clinics

Clinics are sessions in which learners devote their energy to solving a given problem, and may be integrated with field trips, roleplays and demonstrations (photometry, films, videos etc). Such sessions work best when the problem is real life and based on 'immediate' case study data; thus a 'clinic' can address a real-world situation, and possibly using techniques and approaches learnt elsewhere in the course, the team can produce a 'real' solution - the whole exercise constituting an action-research-learning experience.

T-Groups

A controversial training method, because it tends to encourage openness and self-disclosure. A group is given a task or project, but the focus is essentially on group processes and inter-personal relations. Much depends on the skill of the outside observer, who must subsequently provide feedback on such things as the emergence of leaders, the failure of other members to achieve leadership and the impact of certain behaviour and comments on other group members.

O.D. Gathering

Organisation development data gathering encompasses a range of methods aimed at providing a means for the expression of suppressed feelings concerning the role of individuals in the direction (or mis-direction) of a course or programme. 'Polling' gives participants the chance to write down, for example whom they perceive as most or least helpful, most or least co-operative etc; 'T-shirting' involves giving group members appropriate labels; 'Do more - Do less' lists suggest how participants might change their contributions. This type of activity tends to go on at some level in any training course, even if only informally, over the dinner table. By operationalising such feelings in these ways the group may exert greater control over the direction of the course.

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